

REMARKS

Claims 1-24 are pending in this application. By this Amendment, Figure 11, the specification and claims 5, 13 and 21 have been amended. Figure 11 and the specification have been amended for clarification and contain no new matter. Claims 5, 13 and 21 have been amended only for clarification in response to the claim objections and do not add any further limitations.

Reconsideration in view of the above amendments and following remarks is respectfully requested.

1. CLAIM OBJECTIONS

The Office Action objects to claims 5, 6, 13, 14, 21 and 22. Applicant respectfully submits that the above amendments obviate the grounds for the objections. Withdrawal of the objections and thus allowance of claims 5, 6, 13, 14, 21 and 22, which are not otherwise rejected, is respectfully requested.

2. 35 U.S.C. §103(a)

The Office Action rejects claims 1-4, 7-12, 15-20, 23 and 24 under 35 U.S.C. §103(a) over Hashizume et al. (U.S. Patent No. 5,513,278, hereinafter "Hashizume") in view of Hirayama et al. (U.S. Patent No. 5,509,092, hereinafter "Hirayama"). Since the references, alone or in combination, do not disclose or suggest all the features of the claims, the rejection is respectfully traversed.

The Office Action states that:

[w]ith regard to claim 1, Hashizume, et al. [discloses], an image recognition apparatus (See for example, Fig. 4) comprising: an input for inputting image data (See item 10, in Fig. 4); and a processor for executing a process comprising the steps of: 1) detecting a character regions, i.e., area, where

character images exist from image data input via said input unit (See item 3, in Fig. 4); 2) recognizing character images in said character region to obtain character code data (See item 2, in Fig. 4); 3) converting said character code data into output character images (See item 5, in Fig. 4); 4) judging whether said output character images fit within said detected character region when said output character images are outputted (See col. 4, lines 52-67); and 5) enlarging said character region within a specified range when said output character images do not fit into said character region and judging whether said output character images fit within the enlarged region (which read on col. 5, lines 7-24). While Hashizume does automatically outputs [sic] the recognized character to the font determiner which determines the font for the recognized character based on at least the result outputted from the area judgment unit, Hashizume, et al. does not explicitly call for enlarging the character region and judging whether the output character images fit within the enlarged region. However, Hirayama, et al. (item S3, in Fig. 4; and col. 5, lines 29-40) teaches this feature.

See the Office Action, pages 2-3 (emphasis added).

However, as recognized in the Office Action, Hashizume fails to disclose or suggest enlarging the character region and judging whether the output character images fit within the enlarged region. Furthermore, Hashizume also fails to disclose or suggest, the combination of features recited in claim 1, including at least the features of a processor for executing a process comprising the steps of: 3) converting said character code data into output character images; 4) judging whether said output character images fit within said detected character region when said output character images are outputted.

The Office Action states that Hashizume "provides the capability to make adjustment, such as enlarging the character image area, if the outputted character image is not properly located within the determined character area." See the Office Action, page 3. However, Applicant respectfully disagrees with this assertion. Hashizume merely discusses judging handwritten characters inputted and does not discuss any outputted character image within a determined character area. See Hashizume, Abstract and Figure 4. As illustrated in Figure 7 of Hashizume, the

character size "judgment" is conducted only in regards to the input device. See also Hashizume, col. 2, lines 42-52.

Hirayama fails to cure the deficiencies of Hashizume. Hirayama discloses a "character box enlarging means 31 [which] enlarges the height and width of the enclosing rectangle by factors of h_1/h_2 and d_1/d_2 , respectively." See Hirayama, col. 5, lines 38-40. As such, Hirayama does not disclose or suggest, similarly to Hashizume, enlarging the character region within a specified range and judging whether the output character images fit within the enlarged region. Additionally, Hirayama does not disclose or suggest converting said character code data into output character images and judging whether said output character images fit within said detected character region when said output character images are outputted. Rather, Hirayama provides an enlargement ratio without any form of judging, where "the character string modifying means 32 divides and modifies the character strings (see FIG. 11(D)) and provides the reshaped text to be drawn according to the outline font, which is close to the original image (see. FIG. 11(E))." See Hirayama, col. 6, lines 42-46.

Therefore, since Hashizume discloses a handwritten character recognition apparatus and Hirayama discloses an OCR apparatus, which are not combinable, and because neither Hashizume nor Hirayama disclose or suggest at least the feature of judging whether the output character images fit within the enlarged region, as recognized in the Office Action with respect to Hashizume and as mentioned above with respect to Hirayama, claim 1 is allowable.

With respect to claim 2, the Office Action states that Hirayama, Figure 11 and col. 4 (col. 5 is considered to be right), lines 33-40 disclose the features of claim 2.

However, Hirayama does not disclose or suggest the combination of features of claim 2, specifically an image recognition apparatus as claimed in claim 1 wherein, when said processor judges that said output character images do not fit within said enlarged region, said output character images' size is reduced for outputting.

Hirayama does not disclose or suggest a process that judges an output character image, let alone reducing an output character images' size when the processor judges that said output character images do not fit within an enlarged character region.

With respect to Hirayama, Figure 11, which the Office Action purports renders claim 2 obvious, Hirayama states, as mentioned above, "the character string modifying means 32 divides and modifies the character strings (see FIG. 11(D)) and provides the reshaped text to be drawn according to the outline font, which is close to the original image (see. FIG. 11(E))." See Hirayama, col. 6, lines 42-46.

Therefore, Figure 11 of Hirayama does not disclose or suggest any judgment, let alone the combination of features of claim 2.

With respect to Hirayama, col. 4 (col. 5 is considered to be right), lines 33-40, which the Office Action also purports renders claim 2 obvious, Hirayama states:

a character actually drawn becomes smaller than the recognized character that is associated with the enclosing rectangle. To correct for the above size reduction, that is, to draw a character having the same size as the character image even according to the outline font, the character box enlarging means 31 enlarges the height and width of the enclosing rectangle by factors of $h1/h2$ and $d1/d2$, respectively.

Therefore, Hirayama does not disclose or suggest any judgment, let alone the combination of features of claim 2.

With respect to claims 9, 10, 11, 12, 15 and 16, as well as claims 17, 18, 19, 20, 23 and 24, the Office Action states that arguments similar to claims 1, 2, 3, 4, 7

and 8 are equally applicable. However, Applicant respectfully submits that claims 9, 10, 11, 12, 15 and 16 are independently allowable as they recite image recognition methods. Further, claims 17, 18, 19, 20, 23 and 24 are also independently allowable as they recite a computer readable program product for recognizing images.

For at least the reasons set forth above, Applicant respectfully submits that claims 1, 9 and 17 are allowable. Claims 2-4 and 7-8 depend from claim 1, claims 10-12 and 15-16 depend from claim 9, and claims 18-20 and 23-24 depend from claim 17, and are allowable for at least the same reasons. Withdrawal of the rejection is respectfully requested.


3. CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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Date: August 24, 2004

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